

## ABSTRACT OF THE DISCLOSURE

A first multimode interferometer has a first input port to which an optical signal is applied, a first output port, and a second output port. A first optical waveguide is connected to the first output port of the first multimode interferometer. The first optical waveguide has a refractive index changed in response to a trigger signal externally applied. A second optical waveguide is connected to the second output port. A triggering unit supplies, to the first optical waveguide, the trigger signal for changing the refractive index of the first optical waveguide. An optical switch is provided which can increase the processing speed, can reduce the device size, and is free from dependency on the polarization state of an optical signal.